

In th Claims

CLAIMS

Claims 1-28 (Canceled).

29. (Original) A battery powerable apparatus comprising:
a substrate having a surface comprising at least one node location;
a thin profile battery mounted over the substrate and node location; and
a conductive adhesive mass electrically interconnecting the thin profile battery with the node location, the conductive adhesive mass comprising an epoxy terminated silane.

30. (Original) The apparatus of claim 29 wherein the epoxy terminated silane comprises a glycidoxymethoxysilane.

31. (Original) The apparatus of claim 29 wherein the epoxy terminated silane comprises a glycidoxypropyltrimethoxysilane.

32. (Original) The apparatus of claim 29 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 2% by weight.

33. (Original) The apparatus of claim 29 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 1% by weight.

34. (Original) The apparatus of claim 29 wherein the thin profile battery comprises an outer nickel clad stainless steel surface over which the conductive adhesive mass is received.

35. (Original) The apparatus of claim 29 wherein the thin profile battery is a button type battery having a terminal housing member comprising an outer nickel clad stainless steel surface over which the conductive adhesive mass is received.

36. (Original) The apparatus of claim 29 wherein the thin profile battery is a button type battery having a terminal housing member comprising an outer nickel clad stainless steel surface over which the conductive adhesive mass is received, and the substrate comprises conductive printed thick film ink over which the conductive adhesive mass is received.

37. (Original) A radio frequency communication device comprising:
a substrate having conductive paths including an antenna;
at least one integrated circuit chip mounted to the substrate and in electrical connection with a first portion of the substrate conductive paths; and
a thin profile battery conductively bonded with a second portion of the substrate conductive paths by a conductive adhesive mass, the conductive adhesive mass comprising an epoxy terminated silane.

38. (Original) The device of claim 37 wherein the epoxy terminated silane comprises a glycidoxy methoxy silane.

39. (Original) The device of claim 37 wherein the epoxy terminated silane comprises a glycidoxypropyltrimethoxysilane.

40. (Original) The device of claim 37 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 2% by weight.

41. (Original) The device of claim 37 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 1% by weight.

42. (Original) The device of claim 37 wherein the thin profile battery comprises an outer nickel clad stainless steel surface over which the conductive adhesive mass is received.

43. (Original) The device of claim 37 wherein the thin profile battery is a button type battery having a terminal housing member comprising an outer nickel clad stainless steel surface over which the conductive adhesive mass is received.

44. (Original) The device of claim 37 wherein the thin profile battery is a button type battery having a terminal housing member comprising an outer nickel clad stainless steel surface over which the conductive adhesive mass is received, and the conductive paths comprise conductive printed thick film ink over the second portion of which the conductive adhesive mass is received.

45. (Previously presented) An electric circuit comprising first and second electric components electrically connected with one another through a conductive adhesive mass comprising an epoxy terminated silane; and

wherein at least one of the first and second electric components comprises a nickel containing metal surface over which the conductive adhesive mass is received.

46. (Previously presented) The apparatus of claim 45 wherein the epoxy terminated silane comprises a glycidoxymethoxysilane.

47. (Original) The apparatus of claim 45 wherein the epoxy terminated silane comprises a glycidoxypropyltrimethoxysilane.

48. (Original) The apparatus of claim 45 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 2% by weight.

49. (Original) The apparatus of claim 45 wherein the epoxy terminated silane is present in the adhesive mass at less than or equal to about 1% by weight.

Claim 50 (Canceled).

51. (Previously presented) The apparatus of Claim 29, where the conductive adhesive mass electrically interconnecting the thin profile battery with the node location has an interconnecting resistance of less than or equal to about 0.32 ohm-cm².

52. (Previously presented) The apparatus of claim 29, where the conductive adhesive mass electrically interconnecting the thin profile battery with the node location has an interconnecting resistance of less than or equal to about 0.16 ohm-cm².

53. (Previously presented) The apparatus of claim 37, where the conductive adhesive mass conductively bonding the thin profile battery with the second portion of the substrate conductive paths has an resistance of less than or equal to about 0.32 ohm-cm².

54. (Previously presently) The apparatus of claim 37, where the conductive adhesive mass conductively bonding the thin profile battery with the second portion of the substrate conductive paths has an resistance of less than or equal to about 0.16 ohm-cm².

55. (Previously presented) The apparatus of claim 44, where the conductive adhesive mass electrically connecting the first and second electric components with one another has an electrical resistance of less than or equal to about 0.32 ohm-cm².

56. (Previously presented) The apparatus of claim 44, where the conductive adhesive mass electrically connecting the first and second electric components with one another has an electrical resistance of less than or equal to about 0.16 ohm-cm².

57. (New) The apparatus of claim 29, wherein the conductive adhesive mass comprises physically interconnecting the thin profile battery to the node location in the same interconnection as the electrical interconnection.

58. (New) The apparatus of claim 29 wherein the conductive adhesive mass comprises only four components.

59. (New) The device of claim 37 wherein the conductive adhesive mass comprises physically and electrically bonding the thin profile battery in the same connection to the second portion of the substrate conductive paths.

60. (New) The device of claim 37 wherein the conductive adhesive mass comprises only four components.

61. (New) The apparatus of claim 45 wherein the conductive adhesive mass comprises physically connecting the first and second electrical components in the same connection as the electrical connection.

62. (New) The apparatus of claim 45 wherein the conductive adhesive mass comprises only four components.